WAVEGUIDE TO LAMINATED WAVEGUIDE TRANSITION AND METHODOLOGY

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Abstract

One embodiment of the present invention includes a structure that defines at least a transition interior, the structure including electrically-conductive materials, the structure defining first and second openings to the transition interior, the first opening configured to be open toward a first interior, of a first waveguide, which is a laminated waveguide, and the second opening configured to be open toward a second interior, of a second waveguide, the second interior being defined by an electrically-conductive structure of the second waveguide, whereby an electromagnetic wave is capable of being propagated via the transition interior, from one of the first and second interiors to the other of the first and second interiors, wherein content of the first interior has a dielectric constant that differs from a dielectric constant of content of the second interior, and the second waveguide is made not via lamination on a same substrate as the first waveguide.